



# INSIDE SSD

VOLUME I

JANUARY 2004

## "DR. PHIL GOOD" RETIRES AFTER 35 YEARS OF GOV'T SERVICE

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# MANAGEMENT CORNER

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On behalf of the management team of Satellite Services Division and RSIS, I would like to wish everyone a happy and prosperous New Year!



This is the inaugural edition of a quarterly employee newsletter to highlight the professional and personal achievements of our very own dedicated employees within SSD. As we undertake new and greater challenges during this year, it is important to continue to work together as a team. Establishment of this newsletter will hopefully provide an opportunity to communicate new ideas and perspectives through recognition of our peers who are doing great things on the job as well as in their personal and private lives.

I encourage each and every employee to provide input into this newsletter. I sincerely believe this forum will be useful to all and serve as an effective way to communicate the great work we are doing at SSD to others outside of SSD.

Special thanks to all who contributed to our inaugural issue and to Ziyadah Joynes, RSIS, for designing the format and editing material for inclusion.

*Reginald Lawrence  
(Chief, Satellite Services Division)*



# PRODUCTS & SERVICES DEVELOPMENT

## New Snow and Ice Mapping System

The Interactive MultiSensor Snow and Ice Mapping System (IMS) is nearing completion by IPB and the Science Team. Featuring a higher resolution (4-km versus 24-km) product which promises to improve operational weather and climate models, the new system has



received a very positive response from primary customers, which include the National Centers for Environmental Prediction (NCEP) and

Climate Prediction Center (CPC). Parallel tests are being conducted within the SAB and analysts are very pleased with the capabilities of the new interface.

**Tim Kasheta (RSIS Employee of the Month)** has done the majority of programming for the new IMS and has recently been working on completing inclusion of the National Ice Center (NIC) and daily ice edge product, the National Operational Hydrologic Remote Sensing Center (NOHRSC) US snow map, and the NCEP Special Sensor Microwave Imager (SSM/I) ice product. Integration of these multiple products is a significant achievement for the SSD Snow/Ice mapping project. Many thanks to the SAB snow analysts for their diligence in testing this new system.

-Donna McNamara

## Milestone for Washington Volcanic Ash Advisory Center

On November 1, 2003, the Washington Volcanic Ash Advisory Center (w-VAAC) celebrated its sixth full year since first being established in 1997 under a mandate for 24 hour support for volcanic ash advice by the International Civil Aviation Organization (ICAO). In an interesting coincidence, the Washington VAAC produced its 7500 Volcanic Ash Advisory (VAA) on the same day. VAA have been written for 26 volcanoes (17 within the Washington VAAC's boundaries) with Tungurahua in Ecuador (2677) and Soufriere Hills on the island of Montserrat (2589) contributing to most of the totals. Along with the 7500 VAA, 2276 graphical depictions of ash seen on satellite imagery have also been produced for 16 volcanoes (13 within VAAC) in the same 6- year time span, with most of the graphics being produced for Soufriere Hills (1172). Under the leadership of the SSD Volcano Team Lead Davida Streett and supported by Government Product Lead George Stephens of the Interactive Processing Branch, the RSIS contract staff and W-VAAC Manager Grace Swanson, the SAB volcano analysts have continued to provide exemplary service to SSD's customers in issuing timely advisories pertaining to volcanic eruptions. A few recent testimonials follow:

*Grace - I wanted to take the time to say thank you to both you and your staff for working with United's Weather Center this past weekend concerning the possible ash encounter over Colombia. Much like the staff at the Space Environmental Center in Boulder, Colorado, our meteorology department*





*heavily depends upon the information your people provide to the general public, especially to the airline industry. Your information allows us to continue operating safely, a high priority for UAL.*

*A Special kudos to Jamie on the night shift for answering Sharon's questions and to Greg on the day shift for assisting Dennis with our follow up questions.*

**Dan Watt**

**United Airlines Weather Center**

*"We read each and every one advisory that you send. We forward them to our flights. Our pilots often ask about them and want us to send the latest updates the moment they are received. They have been life savers, literally."*

**Clint Lynch**

**American Airlines Dispatch**

Congratulations to all involved in making the SSD Volcano Program a big success!

*-George Serafino*

## **P**ROFESSIONAL ACHIEVEMENTS

### **Phillip Neal, Contracting Officer's Technical Representative (COTR), Retires after 35 years of Government Service**

**Phillip S. Neal**, who served as a Contracting Officer's Technical Representative (COTR) in the Satellite Services Division from September 13, 1994, until his retirement on January 2, 2004, received the thanks and best

wishes of colleagues, relatives, and friends at a gala retirement celebration at Phillip's Flagship on December 4, 2003. Phil's 35-year career of Government service is notable for perseverance, achievement, and an ever-present concern for others



by which he was known and will be remembered by Division colleagues. He began his career in January 1968 as a janitor at Andrews Air Force Base Hospital. After working briefly in

this capacity and as a laborer and cartographer's aide, Phil accepted a position as Physical Science aide in the Gravity Division at Navoceano in October 1970. His insight and hard work resulted in his promotion to Physical Science Technician. He accepted a lateral transfer to work at NOAA in June 1979. He was reclassified as a Computer Systems Analyst in November 1979 and progressed steadily, whereupon he was again reclassified in November 1991 as a Computer Specialist. Phil accepted an SSD staff position in January 1993 and was certified as a Contracting Officer's Technical Representative (COTR) in December 1993. He was officially assigned as a COTR under former Division chief Benjamin Watkins in September 1994 and served in this capacity until his official retirement date of January 2, 2004. Phil and his wife, Evelyn, plan to celebrate his retirement with a cruise to Alaska through the northbound glacier route. He plans to spend time devoted as always to family and friends, enjoying his farm, and reminiscing about a career well spent. SSD will miss Phil as we reflect upon his career that exemplifies encompassing success. When we think of Phil Neal, we are reminded of a successful career—a career that resulted from talent, commitment, and the quest for personal achievement with unwavering faith and goodness to all.

*-Elizabeth Ewell*



# PROFESSIONAL ACHIEVEMENTS

## Barbara Hickman Receives 2003 Presidential Award

**Barbara Hickman**, Systems Engineering Manager for RS Information Systems (RSIS), continues to demonstrate outstanding leadership and technical skills that have helped ensure the highest quality of



NESDIS information services in support of public safety and emergency management. As the Systems Engineering Manager for RSIS on the SDDS contract,

Ms. Hickman oversees the design, test, and integration of real-time acquisition for current and future series of geostationary and low earth orbit satellite data, as well as server presentation and distribution for front-end mission critical systems. Most notably during 2003, the ingest and processing of GOES-12 and GOES-9 satellite data streams have been performed with extensive testing, while ensuring a concurrent overlap period of GOES-8 and GMS-5 data with no loss of data on tight deadlines. These data and products are used by all National Weather Service Weather (NWS) Forecast Offices and National Centers for Environmental Prediction for various forecast responsibilities. Ms. Hickman's consistent application of leadership and technical skills also contributed to ensuring success of new builds of the Advanced Weather Interactive

Processing system (AWIPS). She has worked with inter-organizational teams and specifically with NWS in planning for and execution of new AWIPS releases. Her major contributions have been in the integration of new satellite data products into the automated processing streams which support NWS WFO forecast operations. Ms. Hickman's work with NWS on compressions studies has come to fruition with the Network Control Facility (NCF) to compress the satellite data transmitted through NOAAPORT as used in the NWS Weather Forecast Offices on the AWIPS. With the limited available bandwidth on the NOAAPORT system, any obtainable compression may allow for an increased volume of model data to be supplied to AWIPS. Compressing satellite data for AWIPS is no trivial task; given the stringent requirements of preventing time delays in the processing, as well as preserving acceptable data quality. In August 2003, the NCF began compressing the SSD operationally provided satellite data for use in NOAAPORT. Barbara's encompassing challenge has been to ensure that all testing and ultimate transition to new processing be accomplished without adverse impact to ongoing real-time operations. She met this challenge with exemplary leadership, technical skill, and dedication worthy of the 2003 RSIS Presidential Award.

*-Ziyadah Joynes/Jim Amanna*

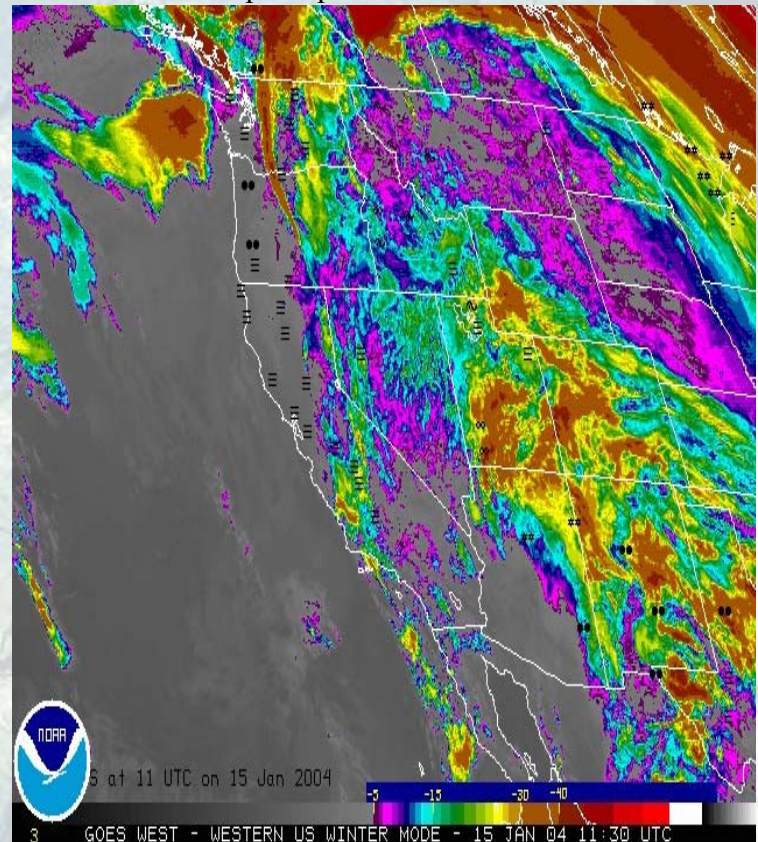


# PROFESSIONAL ACHIEVEMENTS

## Collaborative Research Activities In the Satellite Analysis Branch

Despite a busy schedule as a dedicated precipitation analyst, Jay Hanna of the Satellite Analysis Branch (SAB) has capitalized on his non-operational shifts to collaborate with research partners at the University of Oklahoma and the National Severe Storms Laboratory (NSSL), resulting in the acceptance for publication of a manuscript entitled *Snowbands during the Cold Air Outbreak of 23 January 2003*. The article will appear in the widely circulated American Meteorological Society (AMS) journal **Monthly Weather Review** within the next several months. Dr. David Schultz, of the Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) of the University of Oklahoma and also from the National Severe Storms Laboratory, was the corresponding author on the manuscript. Co-authors on this paper included Derek S. Arndt, from the Oklahoma Climatological Survey at the University of Oklahoma, Dr. David Stensrud from the National Severe Storms Laboratory, and Mr. Hanna. Their study concentrated on snow producing boundary layer horizontal convective rolls associated with a cold air outbreak in the Central US on January 23, 2003. A copy of the manuscript along with other graphics can be found at <http://www.cimms.ou.edu/~schultz/hcr/>. Jay has also been busy independently investigating the relationship between cloud top temperature and the incidence of heavy snowfall using both GOES 8/12 Imager derived cloud products and in situ observations. The project involves development of a detailed satellite enhancement between the critical temperature

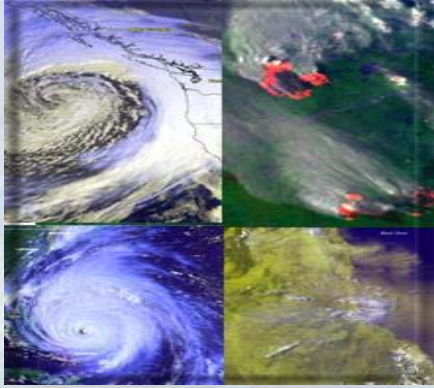
regime of  $-5^{\circ}\text{C}$  and  $-40^{\circ}\text{C}$  (see attached image as well as loops of current surface reports of precipitation overlaid on satellite data at <http://www.ssd.noaa.gov/PS/PCPN/ice-images.html>). It is hoped that the information gained from this study will result in improvements in the SAB winter operations, particularly with regard to enhancing estimates of heavy snowfall from systems exhibiting warmer cloud top temperatures.





## COMMUNITY OUTREACH

### Meteorologist Jason Taylor Reaches Out to Youth



**Meteorologist Jason Taylor** recently visited Renaissance Christian Academy to familiarize third grade students with historically significant imagery that has

appeared on the SSD Operational Significant Event Imagery (OSEI) web pages. A specially prepared, age-appropriate PowerPoint slide show captivated the students and included movie loops and imagery of Hurricane Isabel, the California wildfires, and the Mount Etna volcano eruption. Jason's presentation concluded with a pop quiz. Students who answered questions correctly were rewarded with posters of Hurricane Isabel imagery. Special thanks to Jason for reaching out to youth and encouraging interest in science by highlighting the work of SSD.

## SPECIAL OCCASIONS & CELEBRATIONS

### Staff Member Attends White House Holiday Reception



**Dorothy Brown**, Interactive Processing Branch, attended the annual White House Holiday Reception hosted by President and Mrs. Bush on December 11, 2003. Invited by

Cheryl Barnette of the National Security staff, Dorothy attended the special reception which took place in several White House areas, including the Oval Office. She had the rare opportunity to enjoy conversation, hospitality, fine food, and the beautiful holiday ambiance with White House professionals. President and Mrs. Bush expressed

gratitude to the many White House staff members who work tirelessly and diligently behind the scenes at the White House. It was an evening Dorothy will long remember, and we can be proud that "one of our own" shared in this memorable occasion.

## CONGRATULATIONS

**Ernie Daddio** is the proud parent of Matthew Daddio who received his Bachelor of Science degree from the University of Maryland on December 21, 2003.

## JANUARY BIRTHDAYS

**Alfreda Carter, Ralph Meiggs, Donna McNamara, and Marlene Patterson**

## Family Additions



**Congratulations to Hope Albritton- Smedley and Jason Taylor on their New Arrivals!**

**Cemille Aaron Smedley**  
Born on Sept. 8, 2003

**Jair Major Taylor**  
Born on Sept. 23, 2003

